

Fact Sheets for Category 5 Waters

RIVER BASIN: Rappahannock River Basin
CITY/COUNTY: Fauquier
STREAM NAME: Browns Run
HYDROLOGIC UNIT: 02080103
TMDL ID: VAN-E08R-02
ASSESSMENT CATEGORY: 5A
SEGMENT SIZE: 2.39 - Miles
INITIAL LISTING: 2002 **TMDL SCHEDULE:** 2014

UPSTREAM LIMIT:

DESCRIPTION: Confluence of an unnamed tributary
RIVER MILE: 2.39
LATITUDE: 38.54278 **LONGITUDE:** -77.73056

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Marsh Run
RIVER MILE: 0.00
LATITUDE: 38.52389 **LONGITUDE:** -77.76139

Segment begins at the confluence of an unnamed tributary to Browns Run, near the Route 17 bridge, and continues downstream to the confluence with Marsh Run.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Recreation Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform (2002)

Sufficient exceedances of the instantaneous fecal coliform bacteria criterion (4 of 7 samples) were recorded at DEQ's water quality monitoring station 3-BOS000.72 at Route 653 to assess this stream segment as not supporting of the Recreation Use goal for the 2004 water quality assessment.

IMPAIRMENT SOURCE: Unknown

The source of impairment is unknown.

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- a. An exceedance of the manganese taste and odor water quality criterion in one of one sample collected in August, 1998;
- b. An exceedance of the acute copper criterion in one of one sample collected in August, 1998;
- c. The consensus based probable effects concentration (PEC) sediment screening values for copper (149 ppm, dry weight) was exceeded in a sediment sample collected in August, 1998.

IMPAIRMENT SOURCE: Unconfirmed Natural Conditions

The source of impairments is considered natural

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RIVER BASIN: Rappahannock River Basin
CITY/COUNTY: Fauquier, Stafford
STREAM NAME: Deep Run
HYDROLOGIC UNIT: 02080103
TMDL ID: VAN-E10R-01
ASSESSMENT CATEGORY: 5A
SEGMENT SIZE: 4.83 - Miles
INITIAL LISTING: 1996 **TMDL SCHEDULE:** 2004

UPSTREAM LIMIT:

DESCRIPTION: Confluence of Green Branch
RIVER MILE: 4.83
LATITUDE: 38.46667 **LONGITUDE:** -77.63472

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Rappahannock River
RIVER MILE: 0.00
LATITUDE: 38.41028 **LONGITUDE:** -77.63556

Segment begins at the confluence of Green Branch to Deep Run and continues downstream to its confluence with the Rappahannock River.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Recreation Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform (1996)

Sufficient exceedances of the instantaneous fecal coliform bacteria criterion (6 of 17 samples - 35.3%) were recorded at DEQ's ambient water quality monitoring station at Route 17 to assess this stream segment as not supporting of the Recreation Use goal for the 2004 water quality assessment.

IMPAIRMENT SOURCE: Unknown

The source of fecal coliform bacteria exceedances is unknown.

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RIVER BASIN: Rappahannock River Basin
CITY/COUNTY: Madison
STREAM NAME: Rapidan River
HYDROLOGIC UNIT: 02080103
TMDL ID: VAN-E11R-01
ASSESSMENT CATEGORY: 5A
SEGMENT SIZE: 4.8 - Miles
INITIAL LISTING: 2002 **TMDL SCHEDULE:** 2014

UPSTREAM LIMIT:

DESCRIPTION: Confluence of Kinsey Run
RIVER MILE: 81.06
LATITUDE: 38.42361 **LONGITUDE:** -78.36778

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence of Garth Run
RIVER MILE: 76.26
LATITUDE: 38.36611 **LONGITUDE:** -78.37028

Segment begins at the confluence of Kinsey Run to Rapidan River, at rivermile 81.06, downstream to its confluence to Garth Run, approximately one rivermile downstream of Rt. 662.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Recreation Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform (2002)

Sufficient exceedances of the instantaneous fecal coliform bacteria criterion (2 of 17 samples - 11.8%) were recorded at DEQ's ambient water quality monitoring station 3-RAP077.28 at Route 662 to assess this stream segment as not supporting of the Recreation Use goal for the 2004 water quality assessment.

Additionally, citizen monitoring data from station 3RAP-M3-SOS finds a medium probability of adverse conditions for biota.

IMPAIRMENT SOURCE: Unknown

The source of fecal coliform bacteria exceedances is unknown.

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RIVER BASIN: Rappahannock River Basin
CITY/COUNTY: Greene, Madison, Orange
STREAM NAME: Marsh Run
HYDROLOGIC UNIT: 02080103
TMDL ID: VAN-E13R-03
ASSESSMENT CATEGORY: 5A
SEGMENT SIZE: 5.19 - Miles
INITIAL LISTING: 2004 **TMDL SCHEDULE:** 2016

UPSTREAM LIMIT:

DESCRIPTION: Headwaters of Marsh Run
RIVER MILE: 5.19
LATITUDE: 38.23246 **LONGITUDE:** -78.33414

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with the Rapidan River
RIVER MILE: 0.00
LATITUDE: 38.23400 **LONGITUDE:** -78.25096

Segment begins at the headwaters of Marsh Run and continues downstream to the confluence with the Rapidan River.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Recreation Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform (2004)

Sufficient exceedances of the instantaneous fecal coliform bacteria criterion (2 of 3 samples) were recorded at DEQ's ambient water quality monitoring station 3-MAS001.55 at Route 644 to assess this stream segment as not supporting of the Recreation Use goal for the 2004 water quality assessment.

IMPAIRMENT SOURCE: Unknown

The source of fecal coliform bacteria exceedances is unknown.

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RIVER BASIN: Rappahannock River Basin
CITY/COUNTY: Orange
STREAM NAME: Mountain Run
HYDROLOGIC UNIT: 02080103
TMDL ID: VAN-E17R-02
ASSESSMENT CATEGORY: 5A
SEGMENT SIZE: 9.79 - Miles
INITIAL LISTING: 2002 **TMDL SCHEDULE:** 2010

UPSTREAM LIMIT:

DESCRIPTION: Confluence of Mill Run
RIVER MILE: 9.79
LATITUDE: 38.30639 **LONGITUDE:** -77.96278

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Mine Run
RIVER MILE: 0.00
LATITUDE: 38.37722 **LONGITUDE:** -77.84278

Segment begins at the confluence of Mill Run to Mountain Run, approximately 0.25 rivermiles downstream of Route 617, and continues downstream to its confluence with Mine Run.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Recreation Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform (2002)

Sufficient exceedances of the instantaneous fecal coliform bacteria criterion (7 of 19 samples - 36.8%) were recorded at DEQ's ambient water quality monitoring station 3-MTR003.51 at Route 611 to assess this stream segment as not supporting of the Recreation Use goal for the 2004 water quality assessment.

IMPAIRMENT SOURCE: Unknown

The source of fecal coliform bacteria exceedances is unknown.

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IMPAIRMENT SOURCE: Unknown, Unknown

The source of the impairments is unknown.

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The source of the impairments is unknown.

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RIVER BASIN: Rappahannock River Basin
CITY/COUNTY: Caroline
STREAM NAME: Ware Creek
HYDROLOGIC UNIT: 02080104
TMDL ID: VAN-E21R-02
ASSESSMENT CATEGORY: 5C
SEGMENT SIZE: 2.94 - Miles
INITIAL LISTING: 2004 **TMDL SCHEDULE:** 2016

UPSTREAM LIMIT:

DESCRIPTION: Headwaters of Ware Creek
RIVER MILE: 7.56
LATITUDE: 38.17870 **LONGITUDE:** -77.38788

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence of an unnamed tributary
RIVER MILE: 4.62
LATITUDE: 38.20175 **LONGITUDE:** -77.35021

Segment begins at the headwaters of Ware Creek and continues downstream to the confluence of an unnamed tributary, just downstream from Burma Road.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: pH (2004)

Sufficient excursions from the pH water quality criteria were recorded at DEQ's 2002 freshwater probabilistic monitoring station 3-WAE005.95 in Fort AP Hill property to assess this segment as not supporting of the Aquatic Life Use goal in the 2004 water quality assessment. Two (2) of 2 samples were below the lower range (6.0 SU) of the pH water quality criteria for Class III waters as established in 9 VAC 25-260-50 of the Virginia Water Quality Standards. The pH excursions may be attributable to natural conditions as this segment is a low-lying Coastal Plain environment with no riffles and slow moving pools that are subject to low pH.

IMPAIRMENT SOURCE: Unconfirmed natural conditions

The source of the impairment is unknown, but is believed to be attributable to natural conditions.

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from the Chesapeake Bay. This bottom water flows into the Rappahannock with the incoming tide and then gets trapped by the naturally occurring ridge. Natural conditions are thus considered the main source of the recorded violations and subsequent benthic impairment. However, the low DO conditions may be exacerbated by nutrient loadings in the water body.

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RIVER BASIN: Rappahannock River Basin
CITY/COUNTY: Essex
STREAM NAME: Occupacia Creek
HYDROLOGIC UNIT: 02080104
TMDL ID: VAP-E22R-01
ASSESSMENT CATEGORY: 5C
SEGMENT SIZE: 2.76 - Miles
INITIAL LISTING: 2002 **TMDL SCHEDULE:** 2010

UPSTREAM LIMIT:

DESCRIPTION: Hunters Millpond Dam
RIVER MILE: 10.50
LATITUDE: 38.04060 **LONGITUDE:** -77.00650

DOWNSTREAM LIMIT:

DESCRIPTION: Tidal Limit
RIVER MILE: 7.80
LATITUDE: 37.05280 **LONGITUDE:** -76.98740

Occupacia Creek from the Hunters Millpond Dam to the extent of tidal influences.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: pH

In 1998, the segment was identified to Virginia for listing consideration. During the 2002 cycle, the segment was assessed as impaired of supporting of the Aquatic Life use based on a pH standard violations at the Route 17 bridge (3-OCC010.47).

During the 2004 cycle, the segment was assessed as not supporting due to a pH violation rate of 4/20. The pH TMDL is due in 2010.

IMPAIRMENT SOURCE: Natural Conditions

The pH violations in this segment are attributed to natural conditions.

Continued monitoring to increase the data set and make a confident assessment is recommended. Targeted monitoring and wetland delineation may be necessary to identify the limits of the segment affected by natural conditions. Such segments should be reclassified as wetlands where appropriate.

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IMPAIRMENT SOURCE: Natural Conditions

The source of the impairment is attributed to natural conditions.

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RIVER BASIN: Rappahannock River Basin
CITY/COUNTY: Essex
STREAM NAME: Mount Landing Creek
HYDROLOGIC UNIT: 02080104
TMDL ID: VAP-E23R-02
ASSESSMENT CATEGORY: 5C
SEGMENT SIZE: 1.19 - Miles
INITIAL LISTING: 1998 **TMDL SCHEDULE:** 2004

UPSTREAM LIMIT:

DESCRIPTION: First tributary above the Route 716 bridge
RIVER MILE: 5.63
LATITUDE: 37.96360 **LONGITUDE:** -76.94980

DOWNSTREAM LIMIT:

DESCRIPTION: Tidal Limit
RIVER MILE: 4.44
LATITUDE: 37.96290 **LONGITUDE:** -76.93040

The segment starts at the first tributary upstream of the Route 716 bridge, and extends downstream to the effect of tide.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: pH, Dissolved Oxygen

Mount Landing Creek from the Route 716 bridge to the tidal limit at river mile 1.00 was assessed not supporting of the Aquatic Life use support goal in 1998 based on pH violations recorded at monitoring station 3-MTL004.82, located at the Route 716 bridge.

The segment location was changed during the year 2002 cycle because it was determined that the tidal limit is actually located at approximately river mile 4.44 and that the swamp conditions that may cause the DO impairment extend upstream of the bridge. In addition, the segment was also listed as impaired for dissolved oxygen.

During the year 2004 cycle, the pH violation rate was 22/46 and the dissolved oxygen violation rate was 10/48. The pH TMDL is due in 2010 and the DO TMDL is due in 2014.

IMPAIRMENT SOURCE: Natural Conditions

The source of the impairments is attributed to natural conditions.

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RIVER BASIN: Rappahannock River Basin
CITY/COUNTY: Essex
STREAM NAME: Mount Landing Creek
HYDROLOGIC UNIT: 02080104
TMDL ID: VAP-E23R-07
ASSESSMENT CATEGORY: 5C
SEGMENT SIZE: 4.91 - Miles
INITIAL LISTING: 2004 **TMDL SCHEDULE:** 2016

UPSTREAM LIMIT:

DESCRIPTION: Bull Neck Creek
RIVER MILE:
LATITUDE: 37.97860 **LONGITUDE:** -77.00650

DOWNSTREAM LIMIT:

DESCRIPTION: First tributary upstream of Route 716 bridge
RIVER MILE: 5.63
LATITUDE: 37.96360 **LONGITUDE:** -76.94980

Mount Landing Creek from the confluence with Bull Neck Creek downstream to the first tributary above the Route 716 bridge

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: pH

Assessed not supporting of the Aquatic Life use support goal based on a pH standard violation rate of 5/13 recorded at monitoring station 3-MTL010.40, located at the Route 629 bridge.

This station is a TMDL study station to address the low pH in Mount Landing Creek.

IMPAIRMENT SOURCE: Natural Conditions

The source of the impairment is attributed to natural swampwater conditions in the watershed.

